



[Wildlife Service photo by C. R. Veitch

A southern royal albatross and chick on Campbell Island. This large, magnificent sea bird breeds mainly on the island and is far ranging in its flights across the ocean.

# Forest and Bird

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### Problems To Be Resolved

MANY problems face us in the forefront of the conservation movement, the outstanding concern of the Society at present being without doubt the South Island beech forest proposals, involving as they do the desecration of thousands of acres of native bush and the murder of thousands of native birds.

It is suggested by ornithologists that the kiwi population, which has its highest New Zealand concentration in the area, alone may number up to five per acre, perhaps more, and yet most of the New Zealand human population, who rejoice in being called kiwis here and overseas, seemingly are prepared to sit back and allow the living images of their proud emblem to be slaughtered in their thousands.

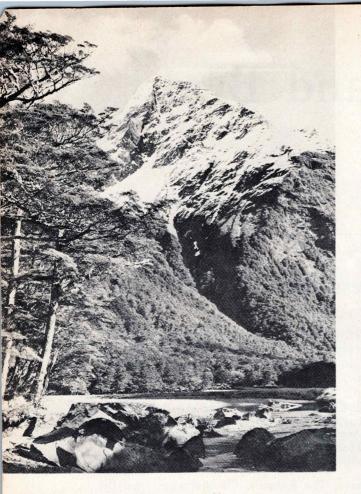
The North Island suffers with the South. The Kaimais, the Mamakus, and the Hauhungaroa Ranges are all threatened by the hungry man of the mill, and the pulping and chipping companies continually press the Forest Service to hand over more and more of our unique heritage.

Local branches, all of them, have their immediate, if smaller but not less important, difficulties—pollution in Doubtless Bay, eutrophication of the Rotorua lakes, and noxious animals everywhere. Of these animal pests, opossums, deer, and goats in that order are the chief enemies. Though their complete eradication may not be possible, control by Government departments must be sharpened up and more strictly imposed.

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Registered at P.O. Headquarters, Wellington, as a magazine.



# New Zealand's National Parks Are Outstanding Examples of the

Natural Heritage

NEW ZEALAND'S most significant natural areas are the national parks, set apart "for the purpose of preserving in perpetuity . . . for the benefit and enjoyment of the public, areas of New Zealand that contain scenery of such distinctive quality or natural features so beautiful or unique that their preservation is in the national interest".

THE national park system had its genesis in 1887, when Te Heuheu Tukino and other Maori chiefs presented to the Crown land which formed the nucleus of Tongariro National Park, and which was constituted by special Act in 1894.

During the next 50 years Egmont, Arthur's Pass, and Abel Tasman National Parks were constituted—Egmont by another special Act and the other two under general legislation enacted in 1928. Adminstration was handled by park boards with little or no co-ordination.

Heading illustration: Ocean Peak in the upper Routeburn Valley is on the boundary of Mount Aspiring National Park and Park.

### Structure Reviewed

The increased interest in national parks and outdoor recreation that generally followed the Second World War underlined the weaknesses in the existing administrative framework. New Zealand had national parks but no unified national park system or policy, and resources in money and manpower hardly existed.

A comprehensive report by the Federated Mountain Clubs was studied in 1945 by a subcommittee of the Organisation for National Development. Noting that a system of central control had been adopted successfully in other countries, especially the United States and Canada, the subcommittee recommended that a national authority should be constituted in New



By P. H. C. Lucas

Director of National Parks and Reserves, Department of Lands and Survey

Zealand to determine broad policy governing the adminstration of parks and to adopt a scheme for the establishment of new parks or the enlargement of existing ones. District committees or boards were proposed to deal with the "routine administration" of individual parks subject to the overriding authority and policy of the proposed central body. No immediate action was taken, but this framework, in fact, became the pattern now in existence.

A broadly similar scheme was submitted to the Minister of Lands in 1949 by the Federated Mountain Clubs and the Royal Forest and Bird Protection Society, and the Royal Society of New

Carrington Peak, Mount Armstrong, and Mount Rolleston are among the majestic alpine scenery in Arthur's Pass National Park.

Zealand made representations along much the same lines.

The upshot was that early in 1950, Mr E. B. Corbett, Minister of Lands, instructed the Director-General of Lands to prepare a National Parks Bill, saying: "The existing statutes are in need of an overhaul and it is desirable in the interests of sound administration that there should be one general law governing the administration of national parks".

### National Parks Act 1952

The outcome was the National Parks Act 1952, which with fairly minor amendments remains in force today. This Act defined the significance and purpose of parks, set up a central body as the channel for policy and finance, and brought a greater degree of conformity to the appointment of boards, which retained direct responsibility for the land under their control.

The 1952 Act listed Tongariro, Egmont, Arthur's Pass, Abel Tasman, and Fiordland as

national parks. Since then five more parks have been established—Mount Cook, Urewera, Nelson Lakes, Westland, and Mount Aspiring—and boards appointed to control each park.

Today the 10 national parks are:

Park	Area (hectares)	Constituted	Board appointed
Tongariro	70,087	1894	1922
Egmont	33,527	1900	1924
Arthur's Pass	98,399	1929	1929
Abel Tasman	19,171	1942	1943
Fiordland	1,228,348	1953	1958
Mount Cook	69,958	1953	1955
Urewera	200,117	1954	1961
Nelson Lakes	57,256	1956	1958
Westland	88,608	1960	1961
Mount Aspiring	287,206	1964	1965
	2,152,677		

The 10 national parks in New Zealand. AUCKLAND ROTORUA NEW PLYMOUTH EGMONT ABEL TASMA ELLINGTON CHRISTCHURCH their value as soil, water, and forest

MOUNT ASPIRING MOUNT COOK
FIORDLAND
DUNEDIN

INVERCARGILL

WESTLAND

GREYMOUTH

ARTHUR'S PASS

conservation areas shall be maintained;subject to conditions necessary to preserve

• subject to conditions necessary to preserve native flora and fauna or for the welfare in general of the parks, the public shall have freedom of entry and access to the parks so that they may receive in full measure the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, lakes, and rivers.

Native forest is protected on all national park land and public access is freely available except that permits are needed to visit the most significant areas scientifically, for example, parts of Fiordland National Park serving as the habitat for the rare flightless takahe (notornis).

The National Parks Act says that the parks shall be so administered and maintained that:

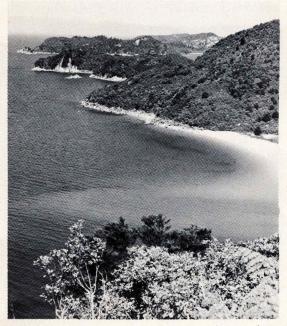
- they shall be preserved as far as possible in their natural state:
- the native flora and fauna shall as far as possible be preserved and introduced flora and fauna exterminated;

### Organisational Structure

The National Parks Authority is the central body established under the 1952 Act "generally to control in the national interest the administration of all national parks in New Zealand". Representative of both Government and private organisations, the Authority has two members representing the 10 national park boards and one nominee from each of the Royal Society of New Zealand, the Royal Forest and Bird Protection Society, and the Federated Mountain Clubs. Government departments represented are Forest Service, Internal Affairs, Tourist and Publicity, and Lands and Survey, which has the Director-General of Lands as chairman ex officio and the Assistant Director-General as deputy chairman.

The national park boards are appointed by the Minister of Lands and each is chaired by the Commissioner of Crown Lands for the land district most concerned. Up to eight other members are appointed by the Minister on the recommendation of the Authority, one of whom must be a nominee of the Federated Mountain Clubs and New Zealand Ski Association where the nature of the park is such that the Authority considers it desirable for mountain climbers and skiers to have representation.

Tongariro and Egmont retain historical variations in board membership, Tongariro



Abel Tasman National Park, Nelson district, has beautiful sweeping coastline with many bays and coves.



A snow-covered track in Governors Bush, Mount Cook National Park.

including a lineal descendant of Te Heuheu Tukino and representatives of both mountain climbing and ski-ing interests; Egmont has a membership tied closely to local interests.

The Department of Lands and Survey acts as executive agency for the Authority and park boards, with officers of the Department serving as chairmen, park rangers, planning officers, secretaries, and treasurers.

Public interest in the parks has increased in recent years. No attempts were made to assess numbers of park visitors in earlier years, but estimated visits increased from 350,000 in 1962-63 to over 2 million in 1973-74. This visitor growth emphasises a continuing need for planning and finance if national parks are to fulfil their prime purpose of preserving key scenic areas in a natural state while providing for public use of them.

### Park Planning and Management

In New Zealand the guidelines for management of parks and people are clear, for New Zealand legislation tries to resolve the

parks, people, and preservation paradox by placing preservation first. The National Parks Act says that the public shall have freedom of entry and access to the parks subject to conditions necessary for the preservation of the native flora and fauna or for the welfare in general of the parks.

In addition, though the Act says parks are "for the benefit and enjoyment of the public", it proceeds to qualify public benefit and enjoyment by saying that freedom of entry and access is "so that they may receive in full measure the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, lakes, and rivers". This is taken to reinforce the concept that national parks are places to which man may come on nature's terms: they are not locked away from people, but they are not all things to all men. They are not recreation resorts, but places where people may resort for re-creation.

Management planning is the technique used today to build the practical application of the National Parks Act into decision making. A system of classification is used in New Zealand parks to identify the acceptable degree of public use which will provide for public benefit and enjoyment with minimal effect on natural features.

The Act defines "special areas" to protect areas of such scientific value that entry by people requires a permit; and "wilderness

areas", where, to retain the quality of wilderness inherent in national parks, large tracts of park land may be set apart with only foot access. By policy decision the National Parks Authority asks national park boards to plan for "natural environment areas", where huts, tracks, and basic amenities are acceptable and "facilities areas", where a higher level of amenities for the visitor may be provided.

### Building Up Scientific Knowledge

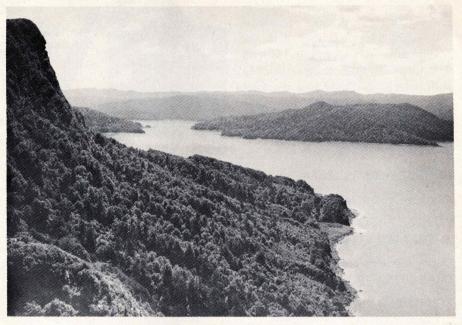
Effective planning demands a knowledge of the natural resources of the parks and increasing effort is going into building up scientific knowledge. This resource information is being collected by park staff, Government agencies (notably the Department of Scientific and Industrial Research), the universities, and individuals. This not only helps identify features that demand special protection, such as habitat for remaining populations of rare birds like the takahe and kakapo, but enables proposals for potentially adverse development to be considered in the light of the knowledge of what may be lost in the development. Knowledge of the resource enables boundaries to be determined and management to be carried out in the light of ecological principles.

It is the task of those involved in national park management to act wisely to enable the people of this generation to enjoy these outstanding





Left: The warm rains in Egmont National Park promote a growth of subtropical appearance. Clothed in lichens, the limbs of trees make grotesque patterns in the misty light of the mountain bush. Right: There are 50 fern varieties growing in Egmont National Park.



Lake Waikaremoana, a prominent feature of Urewera National Park.

examples of New Zealand's natural heritage. Carrying out this task calls for the same vision that led Te Heuheu to lay the foundation for the national park system that this country has today. It demands, too, public support and sympathy, because whatever protection national

parks have by legislation, there is no greater protection than can be given by a sympathetic, informed, and articulate public.

[Photographs by National Publicity Studios.

### BEQUESTS TO THE SOCIETY

The Society has received a number of bequests this year.

You may wish to consider helping in this way.

Is there any cause more worthy of bequests by public-spirited citizens than the objectives of the Royal Forest and Bird Protection Society, which is working wholly and solely for the welfare of New Zealand, present and future? Here is a suggested form of bequest:

"I give and bequeath the sum of . . . . . . . . . . . to the Royal Forest and Bird Protection Society of New Zealand (Incorporated) and I declare that the receipt of the secretary for the time being of the said Society shall be a complete discharge to my executors of the legacy hereby given to such Society."

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### RHODODENDRON TREK

February/March 1975

At a time of the year when the HIMALAYAN hillsides are splashed with colour, an all women group will undertake a botanical and cultural visit to the land of the SHERPA people.

### TASMANIAN SAFARI

February/March 1975

During this tour the group will explore areas rich in early AUSTRALIAN history and walk in the beautiful CRADLE MOUNTAIN National Park.

**ECUADOR** 

June/July 1975

A safari camp visit to the UPPER AMAZON RIVER with its prolific bird and plant life combined with a cruise amongst the GALAPAGOS ISLANDS make this a botanical and wildlife treat.

WRITE TO:

WALTER S. ROMANES.

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### Man's Inhumanity to Nature

By J. V. Jerram, President

MUCH has been written of Fitzgerald Glade, that glorious but all too short stretch of native bush forming a green canopy over State Highway 5 at the beginning of what remains of the once vast Mamaku Forest, and most members have at one time or other exclaimed at its near pristine glory. When going towards Rotorua many a traveller must have wondered what lies to the right, the southern side, and how far the bush extends.

PARALLEL with State Highway 5, some 3 miles as the tui flies, is a new road, Leslies Road, which has its entrance on the Tirau-Putaruru section of State Highway 1. Leslies Road has fairly recently become a public highway and you are at liberty to enter it; it is metalled but in good condition. For 3 to 4 miles you will pass through pleasant pasture land punctuated at intervals with what the Forest Service would describe as useless scrub, but which I would call nursery areas, if left alone, for the rain forest which once covered the whole area.

### Stunned by Horror

There are one or two moments in the life of almost every one of us when one is stunned by the visual horror of some scene before us. Many have experienced this in war or in famine or in natural disaster. Personally I shall never forget the complete ruins of Managua, Nicaragua, after last year's overwhelming earthquake in Central America. One can't, I suppose, compare human suffering with the suffering that nature endures through the depredations or the wanton destruction of man, but if you stand 4 miles up Leslies Road you will be dazed and bewildered by the devastation confronting you. For here over an area of 30,000 acres man has destroyed without concern for nature, for conservation, for native bush, or for native birds. If you recall the landing of man on the moon and mentally add to that picture stumps and blackened logs, you will have some idea of the all encompassing desolation.

The responsibility? The area is Crown land administered by the Forest Service. The Service in its continual search for economic gain, without regard for conservation of our unique native bush and birds, leased to New Zealand Forest Products the area for clear felling and replanting in exotics—radiata pine in the main.

Such replanting has begun in some parts of the 30,000 acres; in others, where burning cast a pall of smoke over Rotorua last summer, planting is to begin this spring. Between the burning and the planting, especially on some of the near 90-degree slopes, erosion is already apparent, and the once clear and lovely stream in the valley below is a mess of mud and debris.

### Different Proposition

The Society has no quarrel with the planting of radiata or other exotic species for timber needs and for export on land which is useless for other purposes. New Zealand Forest Products has done much for the fifth-class farming country lying near Pureora and the Hauhungaroa Ranges, land which has been rendered useless over the years by milling, inefficient farming, and the depredations of goats, deer, and other introduced fauna, but Mamaku Forest is a different proposition.

First milled 70 to 80 years ago, it was superficially milled again 25 years ago for selected tawa. The first milling was for podocarps only—rimu, totara, matai, miro, and rewarewa. In 70 years, of course, such trees from seedlings can come very large indeed; totaras and rimus that I planted myself in 1950 are 35 ft high today. In the area destroyed was a wide selection of native bush—those that I have mentioned plus hinau, kamahi, tawari, and others—trees 50 to 80 ft high.

The milling companies generally cry out for timber suitable for chipping or pulping, and debris left in the Mamaku area must represent some millions of cubic feet of pulpable or chippable timber. The New Zealand sawmiller has much to learn from other countries in the effective felling of timber. The tawa in the burnt-out bush, had it been properly managed, might well have sustained part of our requirements for flooring, panelling, and

furniture for many years. In Australia tawa is in great demand under the pseudonym of New Zealand oak.

### Clear Felling and Burning

This article has dealt with only one section of our remaining New Zealand bush heritage. If the Forest Service has its way, clear felling and burning in that area of the Kaimais facing east towards Tauranga will begin, and discussions on the utilisation of this bush have already begun against the protest of this Society and of many individual residents both farmers and city folk. The protest continues of course to the beech proposals for southern Nelson, the West Coast, and Southland.

Where can one turn for help in this senseless destruction unless it be to the New Zealand public at large? Apathy is not as widespread as it once was, but there is still a "don't care" attitude, or even a more assertive voice, which says in effect export and to Hades with the future.

Successive Governments have been luke warm, even antagonistic, towards the conservation of what remains of our native bush. One feels that though Forest Service policy is no doubt directed by the politician and therefore must be carried out, there are many individuals within the Forest Service who object to (though of necessity mutely) the present and past ravages. Given a lead by our politicians, this group could become more vocal and perhaps instrumental in effecting a change of Government policy.

### Netherlands Decoration Awarded to Mrs P. Moncrieff

MRS Perrine Moncrieff, of Nelson, has received a Netherlands decoration—the Order of Orange-Nassau, which dates back to 1815.

The award, conferred on her by the Queen of the Netherlands, Queen Juliana, was in recognition of Mrs Moncrieff's services as a founder member of the Abel Tasman National Park Board.

Mrs Moncrieff was responsible for preparing the petition to the New Zealand Government in 1941 to have the coastal area between Sandy Bay and Golden Bay dedicated as a national park to be named after Abel Tasman.

The park was subsequently opened on 21 December 1942, the tercentenary of the first sighting of New Zealand by the Dutch explorer.

The decoration was presented to Mrs Moncrieff in Nelson by the Netherlands Ambassador, Mr H. C. Jorissen.

One of our greatest stalwarts and a member of a historic family in Nelson, Mrs Moncrieff is warmly congratulated by the Society.

Mrs Moncrieff recently made a gift of \$2,000 to the Society and the intention is to use this for some specific bird protection project. The Society is grateful for her generosity.



[Geoffrey C. Wood Studio Ltd. photo

The Netherlands Ambassador, Mr H. C. Jorissen, presenting Mrs Moncrieff with the Order of Orange-Nassau.

### Mr Nelson Honoured by I.C.B.P.



MISS Phyllis Barclay-Smith, C.B.E., general secretary of the International Council for Bird Preservation, presenting Mr Nelson, the Society's past president, with a specially prepared parchment valedictory scroll at a short function at the Hotel St. George, Wellington, during her visit to New Zealand after the I.C.B.P. Conference in Canberra recently.

The scroll was specially prepared in Australia by resolution of the whole conference, the first occasion that the

conference has ever taken such action. The citation reads:

"The International Council for Bird Preservation, meeting for the first time in Australasia on the occasion of the XVI World Conference, places on record appreciation of the unremitting and successful work of Roy C. Nelson for the preservation of birds in his country, President of the Royal Forest and Bird Protection Society of New Zealand, Inc., 1955-1974, Chairman of New Zealand National Section, I.C.B.P. since 1960."

### Building for H.Q. Bought in Wellington

THE Society has bought a good site near the main fire station in Wellington on which it is hoped to erect a headquarters building.

Many efforts were made to buy a suitable building, but the prices asked were too high for our needs. It was therefore decided that it was essential to buy a good piece of land in a location that was not in the centre of the city or highly priced but reasonably handy to transport.

The address is 3-4 Kent Terrace. Further details will be given later. The price was \$120,000.

To enable contributors to review their offers letters will be sent to all who have offered loans or donations.

# Preserving Endangered New Zealand Wildlife

A BOUT 30 native bird species are regarded as either endangered or having a threatened existence in New Zealand. In addition there are three other animals — Hamilton's frog, tuatara, and the short-tailed bat — whose future is uncertain. The Government has the responsibility of protecting such fauna, and this article outlines under four broad headings the policy used to discharge this duty.

IN the New Zealand list of endangered wildlife. and wildlife whose future is regarded as being threatened in some way, the following birds may be considered as among the most urgently affected: kokako, takahe, kakapo, orange-fronted parakeet, stitchbird. Zealand shore plover, and Chatham Island robin, snipe, and pigeon. Added to these are Hamilton's frog-one of the three species of native frog—the tuatara, restricted to about 20 off-shore islands, of which only one, Stephens Island, has a relatively large population (this reptile is known to decline almost always wherever it encounters rats and is also disappearing from some islands for other reasons not yet fully understood), and the short-tailed bat, which, until more is learnt about its exact status, has been sighted too few times for satisfaction about its numbers.

### Reservation of Land

The reservation of suitable habitat is considered an essential element in any programme of wildlife preservation, and many areas in New Zealand are set aside for this and similar purposes. The 10 national parks alone cover about 2 million hectares, which form one-fifteenth of the total land area, and there are many smaller areas set aside as wildlife sanctuaries and flora and fauna reserves for the protection of wildlife communities.

The legal restrictions on sanctuaries and flora and fauna reserves are stringent, and entry is prohibited without an authorising permit. For wildlife sanctuaries these permits are issued only in extremely worth-while instances such as for approved scientific study.

New Zealand's off-shore islands are regarded as being of particular importance, as owing to their degree of inaccessibility, they have managed to retain many distinctive communities and rare species, which, through the encroachments made by civilisation, have



Wildlife Service photo by P. M. Morrison

The isolation of the islands on which the tuatara occurs is at once a main cause for its continuing survival and a major stumbling block to long-term field research into this unique reptile.

become extinct on the mainland. Many of these islands have the legal protection which ensures the welfare of the fauna concerned by severely limiting access and human activity.

Stephens Island, main stronghold of Hamilton's frog, is a wildlife sanctuary as are the Trio Islands, Aldermen Islands, Motunau Island, Mokokinau Island, and Karewa Island (nesting petrels and tuatara); Duffer's Reef, White Rocks, and Sentinel Rock (nesting king shags); and Otamatou Rocks (nesting gulls and terns). There are, of course, others.

# By G. E. Coster, Wildlife Service, Department of Internal Affairs

The acquisition and reservation of suitable areas by the Crown are a continuing process, but one which is necessarily restricted by finance. Such land purchase in New Zealand meets with the additional problems of, firstly, joint and sometimes tribal Maori ownership of areas many of which are valuable for habitat conservation, and, secondly, traditional mutton-birding rights which the Maori people are generally very reluctant to forgo even after they have agreed to sell. Often, where this concession is granted by the Government, a loophole is provided in the security essential to preserve the precarious existence of an island's rare inhabitants.

In addition and complementary to the work of conferring an acceptable status on important off-shore islands forest fauna surveys are being undertaken, in co-operation with the Forest Service, of the variety and abundance of native wildlife in those areas of State forest due for milling or subject to conversion to coniferous forest. Where surveys reveal areas, either



[Wildlife Service photo by B. D. Bell

The king shag is a sedentary species whose known breeding sites are all confined to within a circle of a diameter of about 5 km from the White Rocks in the east to Trio Islands in the west.



[Wildlife Service photo by J. L. Kendrick

The little spotted kiwi is the least common of the three kiwi species, being found only in certain parts of the western districts of the South Island.

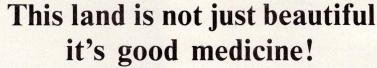
mainland or island, which support populations of rare native fauna, attempts will be made to have them declared permanent reserves.

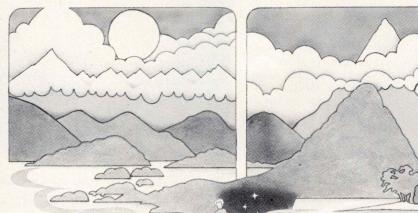
### Research and Management

The effective management of wildlife habitat is the next step after reserving it, and specialised knowledge in this field is gained through research techniques. All the major off-shore islands have been surveyed, and proposals have consequently been made for the creation of reserves where appropriate and for the application of various management programmes.

A specialised study of Hamilton's frog on Stephens Island resulted in its habitat being improved and safeguarded by tree planting, the removal of wekas (which were found to be potential predators), and the erection of protective fencing against the lighthouse keepers' domestic stock.

A management programme which will incorporate co-ordinated land use involving pastoral farming and the conservation of native flora and fauna is being prepared with the owner of Maud Island; programmes being effected on other off-shore islands include the removal of predators such as feral cats and goats, the planting of soil-stabilising and sheltering native flora, the erection of protective fencing, and, where deemed suitable, the re-establishment of





### TE ANAU

Te Anau is the gateway to 3,000,000 acres of Fiordland National Park. Sanctuary for all bird life, it was here that the supposed extinct notornis was found. Steeped in Maori history and legend the area is magnificent with mountains, untouched bush, waterfalls, underground rivers, and glow-worm caves.

### LAKE MANAPOURI

This lake is the most beautiful in New Zealand. It is studded with some 30 small islands which are covered with native forest.

and picturesque scenery in the world.

The West Arm of Lake Manapouri is reached by luxury tourist cruiser. After arrival at West Arm, site of New Zealand's largest hydro-electric station, passengers are taken by coach down to the powerhouse, 700ft. below ground level. The coaches travel across the Wilmot Pass showing you some of the most beautiful

### MILFORD SOUND

Milford Sound is breathtaking. Rudyard Kipling described it as 'the eighth wonder of the world'. This great sea-canyon is ten miles long and flanked by mountains rising up to 6,000ft. Carved by glacier action, the Sound is 430 fathoms at its deepest point, and averages 250 fathoms.

Monarch of Milford is Mitre Peak, a 5,560ft. pinnacle of rock. A launch trip on the Sound is essential to appreciate the beauty.

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bird species. In addition threatened species are removed to more favourable areas.

### Breeding in Captivity

The establishment in captivity of populations of native birds which have been reduced to small localised numbers in the wild, insures against their ultimate disappearance and allows for study which in other circumstances would be impossible. With these aims in view, the Mount Bruce Native Bird Reserve was established in 1961 and has since achieved considerable success in both encouragement of the breeding of various rare native birds and research into their behaviour and ecology to isolate the causes of their decline and open the way for their possible re-establishment in suitable areas of their former range.

In response to careful management North Island saddleback, both species of Antipodes Island parakeet (green and Reischek's), the little spotted kiwi, and the blue duck have bred here, with the eastern or buff weka (obtained from the Chathams), whose progeny have been transferred to Canterbury to form the nucleus of a breeding population. This weka became extinct in the South Island several years ago, but was introduced to the Chatham Islands in 1905, where it fortunately became abundant.

Takahe and kakapo have also been intensively studied at Mount Bruce, the former over a long period, and it is to this work that we are indebted for most of our present knowledge of both species.

A major break-through 2 years ago was the devising of a special area which provided captive takahe with the stimulation necessary for them to lay fertile eggs for the first time ever in captivity.

As it now seems almost certain that whatever numbers of remnant kakapo there may be in their last stronghold in Milford Sound are scattered and have no chance of ultimate survival in the wild, it is proposed to try to establish a breeding colony on an island in the Marlborough Sounds specially chosen for its suitability as substitute kakapo habitat and because it is free from introduced predators. A pair of birds has already been released on this island, and a careful watch is being kept on their progress. Any pairs captured on future expeditions will also be transferred there. The Fiordland National Park Board has recognised the precarious position of this species and has agreed to up to three pairs being taken for this purpose.



[Wildlife Service photo by P. M. Morrison

Hamilton's frog, with the other two species of native frogs, has no free-swimming tadpole stage; young froglets emerge directly from the eggs. The toes are completely unwebbed.

### Displaying Rare Species

The problems associated with the display of rare native fauna really centre around only two species—the tuatara and the kiwi, which is not regarded as endangered, but which has nevertheless been included because of the special interest surrounding it as our national emblem.

Completely protected under the Wildlife Act, each is unique in its own way and both are much sought after by individuals and organisations, both local and overseas, for exhibition. To ensure that this demand in no way prejudices the continued welfare of either species, and to eliminate the possibility of exploitation, strict regulations govern the conditions of their display.

No kiwi is ever trapped directly for taking into captivity for any reason whatsoever, including that of legitimate scientific research, and the extremely limited supply of birds for exhibition and research purposes depends on specimens coming to hand as a result of accidents, or when land development is completely destroying their habitat.

Only approved public authorities such as zoos, botanical gardens, or trusts are allowed, under permit, to hold birds for display, and in recent years they have had to be kept in only an approved nocturnal house; private people and organisations are not permitted to hold kiwis for any form of display or commercial exhibition.

This long-standing policy was originally recommended by the Fauna Protection Advisory Council, an expert body which is the technical adviser of the Minister of Internal Affairs on all matters relating to native fauna.

The council recently recommended a revised policy on taking tuataras into captivity. The new regulations, which differ from the old in only one major respect—the degree of consideration given to overseas applications to hold the reptiles for exhibition purposes—make several provisions.

All tuataras must come from Stephens Island, which has the greatest population (it is considered expedient to allow the smaller tuatara populations on other off-shore islands to remain undisturbed); and the senior fauna conservation officer, or an officer of the fauna conservation section authorised to do so, must supervise the removal of tuataras from the island after first ascertaining that such a removal will in no way hinder any research programme in progress there.

No more that 12 tuataras may be taken from Stephens Island in any one year for any purpose,

and this number may be varied from time to time within the limits of the maximum number of 12 if it is shown that the taking of the animals could have a detrimental effect on the wild population.

Applications by overseas organisations are considered only under very exceptional circumstances (which differs from the former policy, which gave equal consideration to local and overseas applications). A privately owned organisation will be granted a permit to keep tuataras only if it is situated in a major city and if there is no public institution in the same city which has tuataras in captivity or which has applied for a permit to keep them.

Before a permit is issued to any organisation, the Government must be satisfied that an adequate standard of housing, feeding, and management has been provided.

The responsibility encumbent on every country to ensure the survival of its nature heritage becomes increasingly heavy where unique and irreplaceable creatures are involved, particularly it these are threatened in some way. Education, essential in the task of communicating such issues and their consequences to the public, must, however, be supported by effective legislation, where, in the long run, it is better to err on the side of caution rather than leniency.

### Tasmanian Safari

Venturetreks has arranged a coach-cum-hiking comprehensive tour in Tasmania in February-March next year (dates are still flexible). The tour will extend over about 20 days, New Zealand to New Zealand. It is designed to suit middle-aged and older persons of both sexes interested in the Society's objects and natural history generally, but it is not restricted. Ability to undertake easy tramping comparable with the Heaphy, Milford, or Routeburn Track is essential.

The main feature is 6 days in Cradle Mountain, Lake St. Clair National Park. There the party will traverse a world-renowned walk, carrying only personal gear, with an experienced escort, and being serviced from prepared supplies.

Thereafter, the object is to see as much of Tasmania as possible in the remaining time, with attention being concentrated on areas interesting to Society members, scenery—forests, lakes, beaches, farmland—visits to the main centres, and general exploring of Tasmania's rich historical associations.

The itinerary will broadly pursue the outer ring of roads round the island and includes a night at Mount Field National Park and takes in State reserves and conservation areas. Overnight stops will be in camping areas under camping conditions.

The leader will be Owen Raskin, secretary of North Shore Branch. Inquiries should be addressed to Venturetreks Ltd., 71 Evelyn Road, Howick, Auckland.

## Mrs Du Pont Recovering from Injury

As one of the earliest and most esteemed members of the Society and a former member of the Executive and a Councillor for many years Mrs A. J. Du Pont is well known.

Members will be sorry to learn that she has been laid aside with a broken hip through a fall in her home. But she is making good progress, and all will hope that by the time this issue appears she will be fully restored.

Mrs Du Pont was a close friend of the founder, Captain E. V. Sanderson, and today keeps close contact with Mrs Sanderson, who still lives in the family home at Paekakariki.

### Australian Wildlife Tour

Mr Colin Searle is to conduct another Wildlife Tour in Australia, which will be made in July and August next year.

It will be in two parts, the first of which will be a "connoisseurs'" trip into the remote Cape York Peninsula for about 2 weeks. Travel will be by four-wheel-drive vehicles.

The second part will be by coach to Alice Springs and Ayres Rock-Arnhemland.

At this stage costs are not available, but they should be about \$600. Anyone interested should write to Mr Colin Searle, P.O. Box 2577, Auckland 1.

### **News and Views**

THIS feature has been designed to keep members informed of current happenings and events. To make it comprehensive all branches are invited to contribute short paragraphs, preferably not longer than 50 words.

### **Conservation Awards**

Mr R. C. Janes, of Tauranga, a Councillor of the Society, has received a conservation citation from the Nature Conservation Council in recognition of his long and outstanding service in the Bay of Plenty district. His award is for "sustained concern and constructive activity over years in the promotion of many conservation projects".

Mr Owen J. Morgan, of Waihi, was also honoured. At a special assembly at Waihi College a conservation citation outstanding work over a long period was presented to Mr Morgan by the Mayor of Waihi, Mr A. J. Dean.

Pupils of the college have been ardent and active participants in the work of the Waihi District Environmental Association, of which Mr Morgan is president.

The award recognises his significant contribution to the cause of conservation in New Zealand and active participation in all groups concerned with the environment.

### **Forestry Development Conference**

Five years have elapsed since the 1969 Forestry Development Conference, and the Forestry Development Council believes that several events of significant importance to future forestry development in New Zealand have occurred during the past 5 years which call for critical review and evaluation by all parties interested in forestry.

Accordingly the council has arranged to known as the 1974-75 Forestry Devel- far failed.

opment Conference. It is to be in two stages. The first part is to be held from 19 to 21 November inclusive, and the second part will be held on 14 and 15 May next year.

The two main themes for the conference are: Indigenous forest management and forestry development over the next decade.

In addition, there will be a review of the results of the 1969 conference with an updating of those recommendations pertinent to future development in forestry.

The Society will have two representatives at the conference, and a special meeting of selected people from various places was held in Wellington in September to consider present and future policy for the council and to prepare papers for working groups being set up.

### Tree Protection Legislation

The Society has been fortunate in having people prepared to study the legislation in various countries on the of trees. Much useful protection information has been found, and the Society intends to make representations to Government about an improvement in similar legislation in this country.

The North Shore Branch has taken a lively and personal interest in the Birkenhead case, which has aroused national concern.

### **Opossum Menace**

Research on opossums on Kapiti Island has not yet begun, but new cage traps are now ready and the Department of Scientific and Industrial Research will shortly start investigations. All efforts to stop Kapiti hold a conference in Wellington to be being used for opossum research have so

### **Badges**

The large cloth badges are still available at \$1 each.

### **Car Stickers**

The Society's car stickers are handy for those who wish to be recognised; price \$1 each.

### Ruapehu Lodge

We would like to see this used more during the week, as weekend bookings are heavy. A few days' stay at mid-week will give you a quiet rest. The rate of only \$2.50 per night is most reasonable. Inquiries about bookings should be made at head office.

The lack of consideration shown by some users of Ruapehu Lodge is causing concern. Dishes are often left on the benches unwashed, rubbish is left behind, and the place is not properly cleaned. This is most discouraging to the voluntary wardens, Mr and Mrs Fagan, and is a poor reward for a labour of love.

### **Bushy Park**

Bushy Park, under the custody of Mr and Mrs Roy Studd, is now in beautiful condition. This is also an ideal place for a quiet mid-week rest, apart from Mondays and Tuesdays, when it is closed. Members are urged to promote this property as much as possible; the rate is only \$2.50 per night, and electric blankets are available as well as linen. Applications should go direct to the custodian, Bushy Park, Post Office, Kai lwi (Wanganui); phone 49-734.

### Patoka Bush Station

Patoka Bush Station is situated 30 miles from Napier, on the Puketitiri road, 5 miles past Patoka store, and is clearly visible on a rise on the left-hand side of the road. The entrance is marked "Scenic Reserve".

The lodge has two sleeping rooms, is furnished with mattresses and pillows, and accommodates a maximum of 10 persons. Also included is a large living room and a fully equipped kitchen with a refrigerator.

Showers and heating facilities are available. Visitors supply their own linen and blankets (or sleeping-bag).

The Patoka Bush Station was a gift to the Society from the Junior Wildlife Wardens, a condition being that visitors are aware that the building and facilities are to provide accommodation for persons who wish to study flora and fauna.

The lodge adjoins the 13.9-hectare William Hartree Memorial Scenic Reserve, administered by the Department of Lands and Survey, which has an access path. About a quarter of this area is in manuka

### **Head Office's New Address**

BY the time this issue has been published the office of the Society will have moved to larger premises in Lambton Quay, Wellington.

The new address is:

Fourth Floor, 292 Lambton Quay, Wellington. (Above Kodak shop, near Cable Car Lane.)

There is no change in the telephone numbers, 43-239 and 42-954, and the Post Office box number is still 631, Wellington.

and fern, with regenerating shrubs. The remainder consists of regenerating bush on rather steep country.

### Friends of Bushy Park

The Waikato Branch has offered some practical help in the maintenance and improvement of the homestead and reserve at Bushy Park. This is much appreciated.

The Bushy Park subcommittee is investigating the setting up of a voluntary group to be called Friends of Bushy Park. An annual subscription of, say, \$2 would enrol members, who would get a half-yearly newsletter on activities at Bushy Park and would be invited to take part in work parties for specific purposes.

Some additional carpeting is needed in the homestead, and any reasonably good carpet that could be donated could be put to very good use. And electric blankets that could be spared would also be gladly received.

Investigations for a wetland bird area are continuing.

### Camp at Nelson

The annual camp is to be held in Nelson from 11 to 18 January. It will be beautifully sited at the foot of a hill, with a swimming pool in the grounds. Information can be obtained from Mr J. K. Martin, 21 Stafford Avenue, Nelson, by sending a stamped addressed envelope. Applications close on 10 December.

### **Donations**

It is most encouraging to receive so many donations both small and large.

The new subscription rates have been willingly accepted, and the Council and Executive are grateful that in spite of the necessary increases many members still feel disposed to include a donation with their subscriptions.

### **Annual Accounts**

The change-over to annual accounts has been a big task for the office staff, but has proceeded smoothly. The change will lighten the administrative load considerably after the first year.

Every effort is being made to streamline office work to keep costs down and in spite of the greatly increased work of the Society the office staff has been kept to three full-time people plus two part-timers. Casual assistance is obtained to meet special needs.

### **Voluntary Help**

The Society owes much to Mr Lennie (chairman) and his Wellington Branch members who give so much time in helping head office, especially in placing copies of FOREST AND BIRD in envelopes for posting and the many inserts we have had in the tide, and it is not considered that an

past year. This voluntary effort means a great deal to the Society, which is really a "conservation family". Long may this essential service be so freely forthcoming.

### Development

Auckland Branch has set up a section for Auckland at Manurewa. Wellington has done likewise in the Kapiti district to serve the area between Paekakariki and Waikanae: another section has been started at Porirua to serve this new city.

There are so many local problems that can be dealt with on the spot if there is an organisation there and the Society can do a valuable job is setting up sections of branches wherever a need arises. A special establishment grant is made by head office for this purpose.

### **New Leaflets**

The following reprints of articles from FOREST AND BIRD have been sent to branches for general use: "Wellington's Otari Native Museum", "Decline in Takahe Plant Numbers", "Menace of Introduced Animals and Plants", and "Birds of the New Zealand Shore".

Requests for school project material influenced the choice.

### **Conservation Subcommittee**

subcommittee This is now fully operational under the chairmanship of Mr R. C. Nelson, past president, and is tackling several most pressing environmental and conservation matters, such as the policy on indigenous forests, noxious animal control, water classification and legislation, the Kaimai and West Taupo forests, and wildlife legislation (the Hunn Report).

### **Farewell Spit**

A proposal to put an airstrip on Farewell Spit is being strongly contested by the Society and other organisations. would greatly disturb this habitat of many birds. Light planes can already land at low airstrip is necessary. (See the November 1973 issue of this journal.)

### Fight to Preserve Forests

The Society continues its fight to preserve our indigenous forests. They become more precious year by year.

The President and some Executive members, have visited various districts, including the Pureora Forest in the King Country, the Walter Scott Reserve (Waikato), and the Kaimai-Mamaku areas, as well as the West Coast beech forests.

The Society is doing all it can in negotiating with both private enterprise and the New Zealand Forest Service.

### **Under-30 Membership Drive**

The membership subcommittee is arranging an under-30 membership drive, which is to run from 1 November to 31 May next year.

The Executive is keen to see more people in the 20 to 40 age bracket taking an active part in the work of the Society. Many new

environmental groups are being set up from people mainly in this age bracket.

### "International Wildlife" Magazine

The New Zealand Embassy in the United States of America has drawn attention to the fact that this important magazine would consider contributions (with photographs) of suitable articles on New Zealand wildlife.

The style should be vital and written with a sense of purpose, and articles should be strikingly illustrated. The length of articles should be from 1,000 to 2,500 words and contributions are needed from 4 to 6 months before publication. Payment is in line with what other quality magazines offer.

### November 1973 Issue (No. 190)

Only file copies of this issue of FOREST AND BIRD are held in head office, and another half-dozen copies are wanted. If anyone has this issue and does not wish to retain it, we would appreciate the copy.

### South Pacific Conference on National Parks and Reserves To Be Held in Wellington

THE second South Pacific Conference on National Parks and Reserves is to be held in the Legislative Chamber of Parliament Buildings from 24 to 27 February. It will be preceded by a pre-conference tour which will take delegates through the Urewera Forest to Napier and thence over the Taupo road to the Chateau, Tongariro National Park, and on to Wellington.

Mr A. W. V. Reeve is a member of the organising committee of the National Parks Board, having been nominated by the Society.

The aims of the conference, which is expected to be far larger than the first conference, held in Australia, are:

• To consider the political, social, and economic implications of engendering cooperation among the territories and countries of the South Pacific in the conservation of natural and historic areas. • To discuss what practical steps are necessary to set up and effectively manage systems of national parks and allied reserves in the South Pacific.

The following countries, states, territories, and organisations are to be represented:

Papua New Guinea, Cook Islands, Fiji, Tonga, Niue, New Caledonia, Western Samoa, American Samoa, United States Trust Territory, Australian Federal Government, New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, New Zealand, South Pacific Commission, and the International Union for Nature and Natural Resources (I.U.C.N.).

The Society may be invited to send an observer.

# Saving the Last Stands of Indigenous Forest from Extinction

FOR half a century the Society has been striving to save from extinction the remaining stands of indigenous forest not only because it is unique (it is of incalculable value for the protection and conservation of water and soil, it is essential as habitat for native birds found nowhere else on earth, and it has great value for recreational purposes), but also because we have an inescapable responsibility to ensure that it is preserved for posterity in an unspoilt condition.

IT is encouraging, therefore, to find others taking up the fight. The Environmental Defence Society, of Auckland, and the South Auckland Conservation Association, of Hamilton, recently sent to the Government a statement urging action. The statement was prepared by Dr Ron Locker, who was interviewed by the "Waikato Times" in August, and both parties have agreed to our quoting extracts.

### Natural Qualities of Landscape

The "Waikato Times" of 30 August 1974 said:

"Dr Locker said that while he and other conservationists appreciated the great and growing value of exotic forestry to the economy, there were many New Zealanders who treasured the natural qualities of our landscape.

"'We don't want to see this wiped off the map without very good reason'.

"Dr Locker said the submission arose from the concern of conservation groups at developments which have received much less publicity than the South Island beech forests—the conversion of huge tracts of bush in the Mamakus, Kaimais, and King Country.

"'Though the total area is about half that proposed for beech conversion, it is of comparable national significance because of the greater population and economic investment in the region," Dr Locker said.

"'We want to see the future of the central North Island forests looked at as a whole or, even better, to be considered within a policy for the whole of the nation's forests.

"'We're increasingly fed up with having to fight battles from a handicapped start. At best, we can hope for minor concessions. Such vast developments of public land should not be planned on commercial values with conservation as an afterthought. "'Even then something's done only if there is sufficient public clamour."

### Recreational Needs

"Dr Locker said he had requested the Government to make a thorough reassessment of forestry policy in the region. One of his arguments is based on the population pressures and recreational needs of the area.

"'Recreational demands are going to be heavy in the future in this region because it contains the three fastest growing towns in New Zealand."

"Native forests rate next to coastline as an outlet, he claims, and even what foresters describe as cut-over or derelict may still be attractive to the public and improve with time.

"Dr Locker used the 1971 census figures to illustrate his point. Hamilton had a population of 80,800 and a growth rate of 18 percent; Tauranga's population totalled 40,300 and had a growth rate of 19.3 percent and Rotorua's population was 39,800 with a growth rate of 18.3 percent.

"'If you compare these figures with the national growth rate of 6.9 percent, it's easy to see what future demands will be like for recreational areas."

"'In spite of this large population the area is poorly served with scenic reserves and there are no national parks', he said.

"Dr Locker said that it was clear that the needs for recreation in the future will far exceed the opportunities available or planned at this time.

"'Though the development for recreation of some extra bush areas needed may be premature at the moment, it is vital to ensure that they do not disappear before they are needed."

# So far.



# So good!

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### Good Distribution of Areas

"The problem was not just to provide sufficient area, but to provide a good distribution of areas readily accessible to different population centres.

"Dr Locker said the creation of forest parks had been one of the most imaginative acts of the Forest Service. These had so far involved protection of forests containing little of commercial value.

"'The way in which they've been developed has been admirable.' But Dr Locker feels the New Zealand Forest Service's offer of a 100,000-acre Kaimai Forest Park is not a satisfactory proposal.

"'It appears to have been arrived at by drawing a line around all State forests in the area and giving a new name, but management plans have been left almost unchanged. It would become little more than an area where no permit was needed for entry.'

"Though there is strong support in the Bay of Plenty for the area to be made a national park, Dr Locker feels the area would be more suitable as a regional park.

"'I see a need for something less than a national park but bigger than a scenic reserve and much more secure than a forest park where the timber business is likely to go on unimpeded."

### Regional Parks

"He said there were a number of areas close to population centres where there was a major feature or a combination of features which could be welded into regional parks. These would form a chain of discontinuous reserves bound together by a single administrative board and a tight, protective planning scheme over private land in between.

"Dr Locker suggested the areas most appropriate in which to establish regional parks were the Kaimais, the environs of Kawhia Harbour, Great Barrier, and Coromandel.

"The Rotorua lakes and Tarawera might also qualify, he said, but he felt these were more deserving of national park status.

"New Zealand Forest Products was now New Zealand's largest company and wielded a great deal of power, Dr Locker said. It owned nine subsidiary companies, had a major share in three others and an interest in 10 associate companies mainly at a 50 percent level.

"In addition Forest Products owned half the Nelson pine forests and was expected to pursue a share of the Buller beech forests. The gestures of the company towards public recreational use of its forests were welcome, he said, but they were of small significance in relation to the immense transformation of the landscape the company engineered.

"'I have great admiration for the ability and drive of their technical staff, but I'd like to see this matched by a genuine concern for conservation values among the directors.

" 'Ecological advertising is no substitute.'

### Timber Race

"Dr Locker said Forest Products were not the only contenders in the timber race. Other interests are at work in the region. In the Kaimai area alone 28,000 acres of private bush is already destined for conversion.

"'Fletchers are heavily involved here and Tasman's forests have already reached the outlet of Lake Tarawera. The Forest Service no doubt also has afforestation plans of its own.'

"The enormous power of the larger timber companies had been acknowledged before. Two years ago the then Director-General of Forests, Mr A. L. Poole, had made that power plain in an unusual outburst when tenders were called for the Kaingaroa Block.

"'He expressed his disgust in no uncertain terms at the pressure tactics and lobbying employed by New Zealand Forest Products, Fletchers, and Tasman, who got together to tender', Dr Locker said. 'In this case they lost, but those same pressures are still being applied, especially at the moment in the King Country.'

"These interests, particularly the current target figure of half a million acres of forest by Forest Products, made it certain that the areas now in dispute would not be the last."

### Alternative to Agriculture

The following is quoted from the statement Dr Locker prepared, entitled, "A Submission to the Government on Forestry Policy in the South Auckland and Rotorua Conservancies by Conservation Interests in the Region":

"The president of the New Zealand Institute of Foresters said recently that the greatest struggle for his profession up to the present had been to establish the idea that exotic forestry was a valid and profitable alternative to the use of land for agriculture. Foresters have indeed been successful in showing that on poor land, and even on good, forestry can be more profitable than farming. New and exciting

possibilities for mixing grazing and silviculture

may be still more rewarding.

"We suspect that present policy is based on the fact that it is administratively easier to give away State forests than to negotiate the conversion of run-down farm lands. This choice, said the president, is a political decision. We agree, and consider it time for politicians to face up to it. . . .

### Controlling Introduced Pests

"The Institute of Foresters has commented on a draft of this submission, and we are glad to find substantial agreement on many of the above objectives. We would take issue on one point of philosophy, however, that 'reservation is a very poor form of land management'. We wish to see many areas of New Zealand, outside national parks, not managed at all, except in the sense of controlling introduced pests. Nature may then do an even better job of management than foresters.

"If our situation is already so desperate that

we need to exploit even the remnants of our North Island native forests to live, what will we be exploiting when our population has trebled (which it surely will)? Even if we stopped immigration and adopted 2-children families now, our population would still nearly double. There is no hope of this in the near future; in fact we still pay for immigrants to come. Positive policies to limit demand on natural resources are a more urgent goal than ever-continuing economic expansion of forest industries into our native forests. We are busy trying to keep the bucket full, while ignoring the hole in the bottom."

[The Society has been pressing for some years for an end to conversion of native forests to exotics, especially in the Mamakus and the Kaimais. We are apprehensive about rumours that parts of the Pureora and Hauhungaroa Forests might be ceded to private millers for conversion to exotics, and we are working on this matter. Members will know that we have been pressing for master planning for the whole of the Coromandel area and other areas such as Tasman Bay. Some years ago we raised with the Minister of Lands the need to plan a regional park area for the Rotorua district, and we trust that this will be accomplished.]

# Is Deer Hunting To Be Widened at Expense Of Forests?

A S a sequel to the strong recommendations the Society made to a Caucus Committee earlier this year a subcommittee of the Society has been studying how the Noxious Animals Act 1956 can be made more effective.

The devastation of our forests by deer, goats, opossums, and other pests is causing the Forest Service great concern.

The latest action of the Society has been to send a letter, signed by the President, to all Ministers and Members of Parliament drawing their attention to a threat of the New Zealand Deerstalkers Association, which is pressing, in the daily Press, for the setting up of deer parks and other relaxations of the Act to provide recreational hunting.

Part of the letter reads:

"The Royal Forest and Bird Protection Society pledges its support to any administration

which, even under pressure from such selfish or unscrupulous pressure groups, continues to support or enact legislation for the benefit of all.

"Private hunting has not proved to be an effective means of animal control. With reference to national parks the National Parks Service of U.S.A. in its Administrative Policy (1967) states: 'Recreational hunting is an inappropriate and non-conforming use of the national parks.'

"The Society's resources will continue to be devoted towards the protection of our natural environment and the sanctity and future welfare of our national parks.

"In these days of widespread environmental concern we earnestly solicit your active support, as an elected representative of the people, in efforts to safeguard the welfare, in every respect, of all New Zealanders."

### The Crested Grebe: A Vanishing Species?

By H. F. Heinekamp

THE crested grebe, *Podiceps cristatus*, is now a rare species of native bird, and unless steps are taken to protect its habitat and to increase its numbers, the population could fall below the numbers needed to make it a successful breeding bird.

TWO useful papers have been written on the subject by Dr K. E. Westerskov: "Distribution and Numbers of the Crested Grebe in Canterbury" (1970) and "History of the Crested Grebe in the North Island and Nelson-Marlborough" (1972).

Dr Westerskov considers that in the last 20 years breeding birds on the Canterbury lakes have been reduced by 35 to 40 percent.

What are the causes of this decline? The answer lies in increased use of the lakes by people for recreation, fishing, or boating (especially speedboats) or manipulation of the levels of the lakes for the purpose of generating electricity.

### Extremely Vulnerable

The grebes, which breed on nests floating on the water, are extremely vulnerable to disturbances by fishermen, when their nests have to be deserted for long periods, or damage by wave action and flooding through either natural causes or changes in lake levels made by the Electricity Department.

Travers (1870) in his "Notes on the Habits of *Podiceps cristatus*" states that some time during heavy rain a lake level rises and then the "eggs have become addled".

Potts (1870) describes three instances in which nests were submerged by floods on Lake Coleridge.

Destruction of nests through natural causes has always seemed to be a problem, but apparently the grebes have learnt to cope with this, because early records suggest that the bird as a species was locally plentiful.

In a letter dated 27 January 1928 Mr Cyril Flower wrote to Mrs P. Moncrieff, of Nelson,



Crested grebes with their floating nest. (From a painting by M. A. Poulton.)

telling her how a nest was destroyed by a rise in lake level. He also described how grebes were then nesting in a reed bed opposite the boarding house on Lake Rotoroa. The boarding house and reed bed are still there, but the crested grebe is not.

### Trips to Lake Rotoroa

I made regular trips on Lake Rotoroa during a bird survey in 1973-74, and though fishermen reported the presence of the bird, their sightings were of white-throated shags.

Grebes have also disappeared from Lake Daniells, though odd sightings are made from time to time. A former resident remembers the grebes there about 1930. One was shot during that period because "the residents never really had a good look at the bird". Moreover, one was caught in one of the smaller streams flowing into Lake Daniells and brought to Nelson and released in the Nelson Botanical Gardens.

Towards the south of the South Island latitude rather than altitude made conditions suitable for this species.

In an article in FOREST AND BIRD Arthur P. Harper described a trip he made in 1894-95. He said;

"In 1894-95, with a Maori, I was 19 weeks from habitation exploring the Karangarua River watershed. We were the first men in this country. Kiwis were everywhere; never a night passed without hearing their whistles on all sides. Wekas took charge of every bivouac and camp. The Blue Mountain ducks had their claims marked off, right up the river, on every inland lake. Several pairs of crested grebes could be seen. There were also kakas, native beautiful thrushes. that songster orange-wattled crow, saddlebacks, tuis. kingfishers, bellbirds, and the ubiquitous robin—that quarrelsome little bird which only looks on a man as one who kicks up grubs for him while blazing a track. In the beech forest country kakapo were plentiful."

### Okarito Lagoon

A. Hamilton (1878), writing of the birds in the Okarito Lagoon district, states: "The crested grebe is tolerably plentiful on the lagoon and smaller lakes".

Most early New Zealand authors agree that the grebe was fairly common, even though exact numbers are not always given.

It is, of course, wishful thinking that we can ever hope to bring back native birds in the numbers described by those early observers. But the question is: Can we protect the grebe in such a way that present numbers can be maintained?

The danger of any small population, whether it is of mammals or birds, is that the gene pool becomes small, with little genetic variability; so breeding can become unsuccessful. Furthermore the lack of social stimulation could mean the end for this beautiful bird, one of the most attractive of our waterfowl.

### Blackbird Feeds Kingfisher

DURING spring last year my brother and his wife saw a blackbird scurrying around their lawn with a beakful of worms. He ran to a spot where a kingfisher flew down to him from a kowhai tree. The blackbird dumped the worms on the ground in front of the kingfisher, which greedily ate them, then returned to the kowhai tree.

This action was repeated several times until the house cat ran out on the lawn and disturbed them.

Perhaps the cat had taken the young of the blackbird, which still felt that it had to feed something, but even so the method of feeding was not orthodox for a blackbird. The action of the kingfisher could be expected, as it is an opportunist in getting its food.

-R. Bell, Pirongia

### **BOOK REVIEW**

# "New Zealand Alpine Plants": Mark and Adams

This beautifully produced publication, of which A. F. Mark and Nancy M. Adams are the joint authors, is a real collector's piece.

It presents some of the more important features of the New Zealand mountains—their origin and structure, environment, flora, and vegetation. The main section deals with most of the 600 or so vascular plants found beyond the tree line.

The book describes, and depicts in colour, in great detail the wide variety of vegetation on our mountains and slopes and would be a valuable addition to the library of anyone interested in this subject.

-A.R.

A. H. and A. W. Reed Ltd. \$13.50 (\$19.50 cased).

### **OBITUARY**

### Dr Gerald P. Fitzgerald, F.R.C.O.G.

THE Society lost a friend and keen supporter in Dr Gerald Fitzgerald, who died at his home, Stoneleigh, Otago Peninsula, on 24 August at the age of 81 years. He was one of the 10 vice-presidents of the Society and had been a life member since 1942.

At Stoneleigh he was able to put into practice his love of native plants and rhododendrons. His woodland garden has been visited by hundreds of admirers, and it has been the venue of many garden parties to raise funds for Society activities.

### Medical Training and War Service

Gerald Fitzgerald was born in the thriving mining township of Kaitangata, near Balclutha. He was educated at Kaitangata Primary School and Otago Boys' High School. He began his medical training at the University of Otago in 1911, but he interrupted this to join the First Expeditionary Force, with which he was on active service at Gallipoli. He was called back to New Zealand to complete his medical course, and as soon as this was done he rejoined the New Zealand forces in France, rising to the rank of captain. After the war he carried out post-graduate work in Britain until he returned to start practice in Dunedin in 1923.

Until he retired in 1970 at the age of 77 he practised in Dunedin. He was on the honorary staff of the Otago Medical School and Dunedin Public Hospital and later specialised in obstetrics and gynaecology. He was elected a Member of the Royal College of Obstetricians and Gynaecologists and later was raised to be a Fellow. He played an active role in the British Medical Association and held the office of president of the Otago Division twice and was president of the New Zealand Branch of the British Medical Association in 1955.

### Keen Supporter

When the Society formed the Dunedin Section Dr Fitzgerald was a keen supporter. He became the local chairman in 1955 and held this position until 1963. He was a member of the Council until 1973, and in 1969 he was elected a vice-president. During his chairmanship the Dunedin Section became a branch of the



Dr Fitzgerald.

Society, in 1958, and in 1964 it was renamed the Otago Branch. Membership rose steadily, and the regular meetings and outings were well attended.

Dr Fitzgerald was responsible for many projects in and around Dunedin. In 1957 he played a prominent part in putting forward the Society's views regarding the gorse infestation on Flagstaff and its threat to native vegetation in the area.

That year the section also became concerned about proposals to provide hydro-electric power from Lake Manapouri. Dr Fitzgerald continued the campaign against Manapouri, and in 1960 he was again prominent in arranging a public meeting. The petition that followed gained many local signatures, and throughout New Zealand 25,000 were obtained.

### Presented Society's Views

During 1963 and 1964 Dr Fitzgerald presented the Society's views to the Otago Catchment Board on the need to retain Lake



# There is a wholeness to life that eludes the ego.

The hawk feels it, and the mouse that scampers to escape its ominous shadow.

But these creatures of the forest do not savour its wonder, part of it though they are – that is the prerogative of man. With human consciousness comes the flowering of reason, the gift of creation, the command to nurture and the power to destroy. Life is now in human hands but only a super-human vision of wholeness can sustain it.

Bill Kleeman and Roger Dodd, in this pictorial essay on a unique mountain and its life community, move us closer to the attainment of that vision.

Their message is conservation, their subject is Taranaki. Taranaki, or Egmont, is a lone peak in a New Zealand coastal plain. Around it lie 83,000 acres of forest and alpine wilderness. It is in this reserve that Bill Kleeman has recorded these 240 full colour photographs. The result is an authentic and hauntingly beautiful account of the landscape, plant and animal life of a mountain region which has inestimable value for man. All wildlife has been painstakingly classified, to provide fascination for the general reader and to satisfy the scientific reader's desire for accuracy.



### **'UNDER THE MOUNTAIN'**

Bill Noel Kleeman - Roger McKenzie Dodd.

240 colour photographs brilliantly captured by a master of international colour photography

PUBLISHED BY LUCAS-ALTMAN PUBLISHING CO. LTD P.O. BOX 1849. AUCKLAND, N.Z. Tuakitoto as a waterfowl-breeding area. The board wished to use it as a ponding area as part of their flood control scheme for the Lower Clutha area. He also agitated for part of the shallow end of Lake Aviemore to be used as a wildlife refuge in the Waitaki River complex. He supported the formation of Mount Aspiring National Park and strongly contested any proposals to change the policy of extermination of deer in national parks.

In 1965 he was one of the speakers at a public meeting to debate the New Zealand Deerstalkers Association's petition to Parliament to remove deer from the noxious animals list. When the "Save Manapouri" campaign began Dr Fitzgerald again led the petition launched by the Society. Some 20,000 signatures were collected from Otago alone.

His love for children led him to speak at numerous functions where he could encourage children to appreciate the native flora and fauna. He sponsored an essay competition for children in standards 5 and 6 in Otago schools on the need for conservation of native birds and forests.

### Acquisition of Lenz Reserve

When the late Mrs E. Lenz, of Opoho, Dunedin, left a legacy to the Society Dr Fitzgerald, with Mr W. King, of the Southland Section, fought for the purchase of a 1,360-acre partly milled bush block at Tautuku in the Catlins district. Funds to build a lodge on this newly acquired Lenz Reserve were raised by members. Both Dr and Mrs Fitzgerald opened Stoneleigh to the public to raise funds from bring-and-buy stalls, and the doctor himself was generous and unstinting in seeking donations and grants from other sources.

As a result of his love of rhododendrons he served on the national council of the Rhododendron Society until 1973. He gave the first David Tannock Memorial Lecture to the Dunedin Horticultural Society, and after an overseas trip with the Rhododendron Society he gave an illustrated lecture to the 1973 annual meeting of the Otago Branch of the Royal Forest and Bird Protection Society.

Dr Fitzgerald was one of nature's gentlemen. He was always interested in people and in all living creatures and the environment in which they lived. He would travel anywhere to speak about the Society's aims. His life can be summed up by the phrase: "We have all benefited from his having been here".

-J. Wallace Ramsay

### New Zealand Joins I.U.C.N.

NEW Zealand has been admitted as a member state to the International Union for Nature and Natural Resources (I.U.C.N.).

Announcing this recently the Minister of Lands, Mr M. Rata, said that the I.U.C.N. had its headquarters in Switzerland and its aims were dedicated to maintaining the highest quality of life for mankind. It also sought to halt the destruction of the natural environment by the promotion of conservation of wild places, animals, and plants in their natural habitat.

The I.U.C.N. was continually engaged in reviewing and assessing world environmental problems, promoting research relating to their solution, formulating statements of policy on conservation, and providing technical assistance and advice. It had a close association with the World Wildlife Fund and the United Nations Environmental Programme.

In New Zealand the National Parks Authority, the Nature Conservation Council, the Royal Forest and Bird Protection Society, and the Tussock Grasslands and Mountain Lands Institute were all I.U.C.N. members, said Mr Rata.

The Department of Lands and Survey, which had overall responsibility for national parks and reserves, would be the point of contact with the L.U.C.N.

### I Care Campaign

**B**RANCHES of the Society have taken a prominent part in the 1974 I Care campaign organised by the New Zealand Broadcasting Service.

There is no doubt that the campaign has made all far more conservation minded, and the early-morning bird calls on radio stations have stimulated interest in native birds.

Branches are to be commended on the enterprise they have shown in arranging displays, public lectures, tree-planting days, and the like, and they have kept the Society's name well to the fore.

It has been good to see the publicity given on television and radio and in the newspapers. This has no doubt stimulated interest in the Society and assisted in the recruitment of many new members during the year.



The Wattie's story starts on the land, so we are as concerned as you that land is managed carefully and protected for the future.



### Over 600 Trees Planted at Lake Tutira

NAPIER Branch had a grey day in August for tree planting near Lake Tutira, about 30 miles from Napier, but more than 600 trees were put out. Mrs Morgan and a group of cheerful younger planters worked enthusiastically with adult members of the branch.

The tranquil lake provided pleasant views, with reflections of varied greens from surrounding trees, brightened with blossoms of golden wattle. Faint wisps of spring green were appearing on the long willow strands etched against the pearl grey of the lake.



Napier Branch members gathered at the lakeside before planting started.



Vigour and enthusiasm from the younger participants.

The trees planted were sturdy, well-grown specimens, and included kowhai, karaka, and pittosporum; there were also several flax clumps. All had been donated by the native plant nursery at Taupo.

Members considered that the project was very worth while, and when the trees mature they are

expected to enhance the attraction of this lovely lake. Previous plantings were growing successfully.

-Rona Lawrence

### I.C.B.P. Conference in Australia

THE International Council for Bird Preservation World Conference was held in Canberra from 18 to 25 August and was attended by two delegates from the Society—Mr David Medway, of New Plymouth, and Mr Brian Ellis, of Wellington. They report that the conference was most profitable and pleasurable and that the opinions of a number of world experts created great interest.

Mr Ellis presented a paper entitled, "Rare and Endangered New Zealand Birds—The Role of the Royal Forest and Bird Protection Society of New Zealand, Incorporated". It was very well received.

The Society is the official representative of the I.C.B.P. in New Zealand.

Some copies of Mr Ellis's address are available on request. All branch secretaries have copies for perusal.

### THE JUNIOR SECTION \*

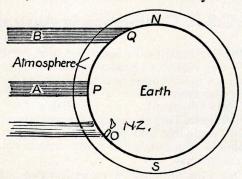
### Spring Brings the Call of the Sun

By Roger Chorlton

"Nothing is so beautiful as Spring
When weeds in wheels shoot long and lovely and lush:
Thrush's eggs look little low heavens and thrush
Through the echoina timber does so rinse and wring
The ear, it strikes like lightnings to hear him sing . ."

- Gerard Manley Hopkins

THOUGH our winters are mild, many plants and animals are living at a slow tempo or hibernating during the colder months. Hibernation in warm-blooded creatures such as mammals (animals whose young are born alive and suckled by their mother) means a period of broken winter "sleep". Very few of our native plants (examples are tree fuchsia and kowhai) lose their leaves for part of winter. Many insects are in the pupa or chrysalis stage of their life cycles, for example, moths and butterflies. Bacteria, some of which are loosely called



The inclination of the sun's rays. The same amount of heat and light arrives at P in the tropics as at O in the temperate zone and at Q in the polar zone. However, this heat must pass through much more air and spread over more land and water in the temperate and polar zones than in the tropics. The tropics are therefore much hotter.

disease germs and others living on the roots of clover in the soil and doing a useful job improving pasture growth for farmers, are much less active in increasing their numbers. Even the birds are doing little but look for food, which is everywhere hard to find. Some lizards and the hedgehog are hibernating.

### More Warmth

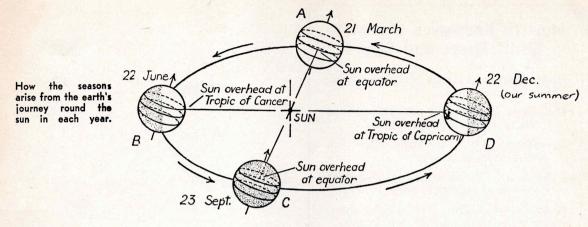
Then, suddenly, it is spring. Our part of the earth comes closer to the energy-giver, the sun. Plants flower and later fruit, providing a wealth of food for many animals. The southern hemisphere, our half of the earth, receives more of the warmth of the sun (see illustration at top of the opposite page). How does this happen?

The seasons are caused by the earth's tilt on its axis ("axle" of spin) to its path round the sun. Spring (September to November approximately) and summer (December to February) mean more heat and light for our country (illustration opposite above). These arouse most of the plants and animals to their full vigour, growth, and breeding.

The first law of nature is self-preservation and the second is race-preservation. Your first concern is to keep yourself alive and, when you grow up, to keep your race alive. First comes food and then mating and breeding.

The seeds stir in the earth in spring; the buds burst out of their winter armour and become

<sup>\*</sup>Sponsored by the J. R. McKenzie Trust.

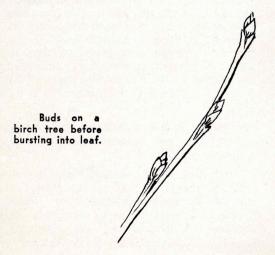


leaves and flowers (see illustration below); the kowhais hang out their golden lanterns and the cherries burst into bloom like rockets. Insects, animals, birds, fish, and men all feel and respond to the call of the sun.

### Signs of Spring

Here are some suggestions to enable you to observe the progress of spring:

- 1. Cock birds calling their spring calls and singing their mating songs. Which birds?
- 2. Insects hatching or emerging as adults. Which kinds?
- 3. Bees working flowers for pollen and nectar. Which flowers?
- 4. Butterflies and moths emerging from chrysalides. Which species and in what order?
- 5. Sandflies biting. Did you know that only the female bites?



- 6. Cicadas drumming. How many can you find?
- 7. Fish rising for insects. What fish and insects?
- 8. Lambs playing. Can you find twins or triplets?
- 9. Birds nesting. What species?
- 10. Yourself swimming. Why?

### Nature Diary

Here are some hints on how to discover changes in the season and record them.

Use your senses of sight, hearing, smell, and touch to enjoy the spring activity. Buy a small notebook for rough notes.

Write down in your notebook what you do as soon as you have done it. Give the date, time of day, place, and exactly what you have noticed. Some people have a nature diary. In it they write a full account made up from the rough notes in the field notebook. The left-hand margin gives the details mentioned above.

Plants: Look for the spring flowers, including the small grass orchids. The native clematis creeper flowers are white stars. The plant climbs shrubs and scrub where there is plenty of light. Can you find kowhai, tainui, lupin, tree lucerne, rangiora, toetoe, manuka, cabbage tree, cape weed, dandelion, and buttercup in flower?

Watch the bees. They have a habit of flying in a straight line from the hive to the flowers they are working.

In late spring some of the flowers will have become seeds or fruits. See if you can find which plants are still flowering in November and December.

# How to Recognise Common Birds' Nests and Eggs

Hedge sparrow: 3-5 clear, deep-blue eggs. Nest in thick cover.

Waxeye or silvereye: 3-4 pale-blue eggs in a nest high up in the branches.

**Greenfinch:** 4-6 dirty white eggs with reddish spots or streaks.

Goldfinch: 4-7 bluish white eggs with spots or streaks of reddish brown.

Redpoll: 4-6 bluish grey, chalky eggs, spotted or streaked with light brown.

Chaffinch: 4-6 greenish blue eggs spotted and streaked with dark purplish brown.

Yellowhammer: 3-5 whitish or pinkish cream eggs pencilled with fine hairlines of dark brown in a nest close to the ground. The English name, scribbling lark, refers to the patterns on the eggs.

Fantail: 3-4 eggs, cream, spotted with grey and brown, especially at the larger end.

Grey warbler: 3-6 pinkish white eggs evenly covered with small reddish brown or purplish spots in a domed nest, with a small side entrance (see illustration at right).

**Ground lark:** 3-7 greyish white eggs thickly speckled with brown in a nest on the ground.

Sniff the scent of gorse, broom, lupin, and other flowers. Can you compare and describe these scents?

In early spring buds of fuchsia, ash, willow, oak, birch, sycamore, chestnut, and other leaf-losing (deciduous) trees come into leaf. Make sketches in colour of the leaves that are out. Transfer them to your nature diary (see illustration at bottom of previous page).

Birds: Look for spring migrants. These are the birds that fly off overseas in autumn to spend our winter in the warmer tropics, or northern hemisphere, where it is warmer (spring in the northern hemisphere). Cuckoos (two species), many waders like the godwits, and other sea birds like the muttonbirds and gannets are migrants.

Look for mating birds and their nests. Don't take eggs or touch the nests, because you may



The grey warbler, one of our smaller native birds, builds its nest with the entrance on the side rather than on top.

make the parents desert the nest. Look, record, and enjoy what you see.

Record the number of each species seen and their sex if possible. Try to find out if there are rings on the legs and the ring numbers if you have field glasses.

### Personal Opinion

At the top of this page is a guide to the recognition of some birds' nests and eggs, but I am not going to tell you how to recognise the eggs of the more common birds such as the sparrow, starling, blackbird, and thrush. The magpie and myna are no friends of mine, as they attack and destroy smaller native birds; so I will not tell you of their nests and eggs. You could watch to see if they attack other birds in your area.

Look for descriptions of the nests and eggs of rarer birds and unfamiliar plants in the following books:

"New Zealand Flowers and Plants in Colour", J. T. Salmon; "An Album of New Zealand Birds", Royal Forest and Bird Protection Society; "A Field Guide to the Birds of New Zealand", Falla, Sibson, and Turbott; "A Bunch of Wild Orchids", Sheila Natusch.

### Hibernation of the Hedgehog

By Brenda Thomas

A N interesting study of the hibernation of the hedgehog, which has given us much more information on the habits and behaviour of this animal, was made recently by Geraldine Irving in the Christchurch district.

MISS Irving kept three groups of two hedgehogs in cages. The hedgehogs were identified with daubs of paint on the bristles and she took care to see that they did not escape from under the cages. The first group was given plenty of food; the second group was given limited food; and the third group was not given any food. The food was a mixture of bread and cat's food that was tinned. The food was weighed and was given with milk, which was measured before being put into the cages. The hedgehogs were weighed on a spring balance morning and night and were treated with ether so that they would keep still.

Taking Temperature

The temperature of the animals was taken by pushing a thermometer through the opening of the spines against the stomach skin surface. The temperature of a hibernating hedgehog was found to be very low compared with that of an active one. A hedgehog's temperature followed that of the surroundings closely, except when the air temperature was very low, and the hedgehog had to come out of hibernation to survive.

To test whether a hedgehog had come out of hibernation the spines of a hibernating hedgehog were sprinkled with sawdust. When a hedgehog breaks its hibernation it shakes itself, and the

A young hibernating hedgehog a bout 3 weeks old and 3 in. long.



sawdust is shaken off. It was found that more than one period of hibernation never occurs within 24 hours. On a warm day in winter the hedgehog will break hibernation and stagger about that evening. Towards the end of winter periods in hibernation become shorter and shorter.

To see when hedgehogs were active road counts of hedgehogs seen on the roads were made three times a week by bus drivers on the Christchurch to Akaroa route. These observations showed that hibernation for hedgehogs in the Christchurch area extends from June and early July to late September and early October, a period ranging up to about 3½ months.

As a result of her studies Miss Irving showed that the hedgehog hibernates because of a drop in temperature and because of a shortage of food. If there is plenty of food, the hedgehog does not hibernate. Food is needed to keep up the body temperature; so when there is little food the animal will die if it does not lower its temperature and hibernate.

### Things To Do

See if you can find hedgehogs coming out of hibernation. You can attract them by putting out saucers of bread and milk at night and watching for the hungry animals in the evening. Keep your dog away. Be careful not to be injured by the spines if you are handling hedgehogs. The wounds can easily become infected; so wash your hands well.

A British book on the subject that some of you might like to read is "The Hedgehog", by Maurice Burton.

[Generally hedgehogs are insectivorous; that is, they live largely on insects, with an addition of small snails, beetles, and worms. They can therefore be said to be beneficial. Unfortunately they can also develop a liking for small chickens and eggs of ground-nesting wild birds.

They are not native to New Zealand, numbers of them having been introduced from about 1870. It is recorded that 100 were imported by an Otago society in 1885, but only three survived the journey. In 1894 a Christchurch man received 12 hedgehogs in exchange for some wekas he sent to England.

Of course it is an offence against the law now to export birds or import animals without a permit, and a very good reason must be shown before a permit can be obtained. Hedgehogs are now widespread throughout New Zealand in both town and country.—R. C. Nelson.]

### ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INC.

(FOUNDED 28 MARCH 1923)

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### SOCIETY'S LODGES AND HOUSES

### Tautuku Lodge

Situated 45 miles from Balclutha on State Highway 92, Tautuku Lodge on the Society's 1,360-acre bushclad Lenz Reserve in coastal south-east Otago is the place for that weekend or holiday in beautiful, peaceful, unspoilt surroundings.

The reserve has interesting bush walks, and native birds are numerous. The round track is a comfortable 4 hours' walk, and as this is in its formative state, visitors are requested to keep to the marked track route.

The lodge is fully equipped and accommodates eight or nine people. It has a lounge, kitchen, two bunkrooms with innerspring mattresses and foam rubber pillows, washroom with tub, basin, and shower, and an ablution block with toilets, basins, and showers. Charges are moderate, as shown below.

The cooking facilities in the modern kitchen are excellent.

Bring with you all food supplies, bed linen, and pillow cases, blankets, towels, tea towels, etc.

Bookings are accepted up to 9 months in advance. No refunds are made unless cancellation is advised at least 1 month before reserved occupancy.

Rates per night are:

Members—adults, \$2; juniors, \$1.

Non-members—adults, \$3. juniors, \$1.50.

A deposit of 50 percent is to be made with each booking.

For free brochure and all bookings apply to Mrs F. B. Bennett, Papatowai, R. D. Owaka. Telephone 160M.

### **Turner Cottage**

The Turner Cottage, on Stewart Island, is available for renting. The cottage, a one-roomed dwelling furnished for three people, can be obtained at a rental of \$2.50 a day.

For details write, enclosing a stamped addressed envelope, to:

The secretary, Southland Section, P.O. Box 1155, Invercargill.

### Bushy Park, Kai lwi

(15 miles north of Wanganui)

Fine old homestead, lovely grounds, 220 acres of native bush.

Make your own programme. Electric stove, hot water, and other facilities available. Bring your own rations and bedding.

Fees: Members, \$2.50 per night; non-members, \$3.50 per night; children under 15, half rates.

Custodian: C/o Bushy Park homestead, post office, Kai Iwi, via Wanganui. Telephone 49-734 Wanganui.

The park is closed to daytime visitors on Mondays and Tuesdays.

### Ruapehu Lodge

Ruapehu Lodge is available to members and guests for occupation. To avoid double booking all bookings must be made with the Society's head office, P.O. Box 631, Wellington.

Fees: Winter season (1 June to 31 October), \$2.50 per night for all persons of all ages.

Summer season (1 November to 31 May), adult members, \$2; junior members, \$1; non-member guests, all ages, \$2.50.

**Bookings:** Bookings may be made by members, sections, and branches 9 months in advance.

A deposit of 20 percent (50c per person per night) is payable on application and the remainder within 6 weeks of the date of the trip.

If bookings are not confirmed by the due date, the space may be relet.

Refunds are subject to \$10 surcharge.

The deposit receipt will be returned with an instructions sheet listing suggested equipment which should be taken on the trip: Tea-towel, torch, sleeping bag, blankets, sheets, and slippers or light shoes. A pillow case is essential.

The wearing of boots inside the lodge is not permitted. No animals or pets are allowed in the park.

Any person occupying the lodge without prior booking must immediately remit the proper fees to the booking officer.

### Waiheke Cottage, Onetangi

The cottage has comfortable bunk accommodation for eight people and has electric lighting, stove, refrigerator, and hot water. Adjacent to a 121-acre wildlife reserve, it is an easy walk to shops and the beach. Everything is supplied except linen and food.

### No animals permitted.

Rental: Summer, \$21 per week.

Winter (after Easter to mid-October), \$15 per week.

Weekends only, \$9.

A deposit of 50 percent is payable on booking, the remainder before entry.

**Booking Officer:** Mr C. Howarth, 31 Brentford Place, Manurewa, South Auckland. Telephone Manurewa 64-838.

